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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,782	12/03/2001	Fred J. Reuter	TI-19560	7094

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EXAMINER

GOSSAGE, GLENN A

ART UNIT	PAPER NUMBER
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2187

DATE MAILED: 09/24/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/998,782		<b>Applicant(s)</b> REUTER, FRED J.	
	<b>Examiner</b> Glenn Gossage		<b>Art Unit</b> 2187	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☐ Responsive to communication(s) filed on \_\_\_\_.

2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.

3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-7 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

5) ☒ Claim(s) 1-7 is/are allowed.

6) ☐ Claim(s) \_\_\_\_ is/are rejected.

7) ☐ Claim(s) \_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 03 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All   b) ☐ Some \*   c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other:
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1. This application is in condition for allowance except for the following formal matters:

A. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. It appears --IMAGE DATA PROCESSING SYSTEM AND METHOD WITH-- should be inserted before "IMAGE," and "PIXEL TILE MEMORY MATRIX" changed to ----TILE CACHE MEMORY--, for clarity and consistency (see claim 1, lines 1 and 9-14 and claim 5, lines 1 and 8-18). The loss in brevity of title is more than offset by the gain in its informative value in indexing, classifying, searching, etc. See MPEP 606 and 606.01.

B. The abstract of the disclosure is objected to because language which can be implied such as "This invention is," "The disclosure concerns," etc. should be avoided. The abstract also does not enable one to quickly determine from a cursory inspection the nature and gist of the technical disclosure as required by 37 CFR 1.72(b). It appears in line 1, "This invention ... processing." should be rewritten using language such as --An image data processing system and method are disclosed in which image data is organized for fast and efficient transfer of image data to and from an image memory using a tile cache.-- or other similar language (see claims 1 and 5, line 1, as well as page 3, lines 12-15). In line 3, it appears "a" should be deleted.

Appropriate correction is required. See MPEP § 608.01(b).

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C. The drawings are objected to because in Figure 3, the labels "PP0" and "PP1" within "boxes" 181 and 182 are somewhat confusing when read in light of the specification (at page 7, lines 1 and 11, e.g.). It appears "PP0" and "PP1" should be changed to --DSP 0-- and --DSP 1-- for clarity and consistency. Similarly, within "box" 183, it appears "MP" should be written out since this acronym or abbreviation does not appear to be "well known" or commonly used in the art. For example, it appears "MP" should be changed to --Master Proc. (MP)-- for clarity (note page 7, line 2, e.g.).

Applicant is REQUIRED to submit a proposed drawing correction in response to this Office action. However, actual formal correction of the noted defect(s) (submission of corrected formal drawings, e.g.) can be deferred until the application is allowed by the examiner.

Also note MPEP 608.02(r) and (v).

D. The disclosure has not been checked by the Examiner to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the disclosure. The following objections are specifically noted:

**In the specification:**

On page 1, line 2, it is not clear how a field "provides" a method. It appears "provides" reads more clearly here as --a--. In line 8, and throughout the specification, all trademarks and trade names, and their respective owners, should be properly identified. See MPEP 608.01(v).

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On page 2, line 8, it appears "later" should be --latter--. In line 17, it appears --directed to-- should be inserted after "is" for clarity. In line 19, it appears "a" should be deleted.

On page 3, line 4, it appears "the" should be moved before "memory" in line 5 for clarity. In line 8, and throughout the specification, the first occurrence of all acronyms or abbreviations should be written out for clarity, whether or not they may be considered "well known." Accordingly, "DSP" should be --digital signal processor (DSP)-- for clarity. See also page 5, line 30. In line 13, it appears "the" should be changed to --an--. Similarly, in line 14, it appears "the" (first occurrence) should be changed to --a--. Also in line 14, it appears "storage memory" reads more clearly as simply --memory--. In lines 15-16, it is not clear how an "invention" "uses" a processor. It appears "This invention uses a processor" in lines 15-16 should be changed to --In accordance with this invention, a processor is used--, or other similar language, for clarity. In line 28, it appears "the" should be moved before "memory" in line 29 for clarity, similar to lines 3-4. Also, it is not entirely clear whether --100-- should be inserted after "memory" in line 29 (first occurrence) and 30 for clarity and consistency (see Fig. 1 and also note page 5, lines 11-12, e.g.).

On page 4, line 2, it appears "a" should be deleted. In lines 6 and 11, it is not clear what is meant by a "cross process" line or direction.

On page 5, line 9, it appears --system-- should be inserted after "processor" for consistency (note line 12, e.g.). Also in line 9, it appears "This invention" should be changed to --The processor system-- analogous to page 3, lines 15-16. Note that --also-- should then be inserted

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before "includes" in line 13 for clarity. In line 26, "that is 1" should be --that is, 1-- for clarity.

On page 6, line 5, it appears "access whereas" should be changed to --access, whereas-- for clarity. In line 29, it appears --is-- should be inserted after "180" for clarity.

On page 7, line 11, it appears "operated" should be simply --operate-- for clarity. In line 16, it is not entirely clear what is meant by "in place" in this context. In line 21, it appears --location-- should be inserted after "memory" for clarity. In line 22, it is not clear what is meant by "cache-like" here.

Again note that these are merely exemplary. The entire specification should be carefully and completely reviewed to ensure that all possible errors are located and corrected.

**In the claims:**

In claim 1, line 7, it appears "the image" should be --an image-- for clarity (to avoid possible antecedent problems, e.g.). In line 8, it appears "store" should be --include-- for consistency (note lines 4-5, e.g.).

In claims 2 and 3, line 3, it appears "into a" should be --to the-- for clarity and consistency (see claim 1, lines 9-10, e.g. Also note the use of "the cache" in line 4, and see the "cache" in claim 1, line 10 and claim 2, line 3.). Also, it appears "of" should be --upon-- for consistency (see claim 1, line 11).

In claims 2 and 3, line 4, "cache and" should be --cache, and-- for clarity.

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In claim 4, line 2, it appears --data-- should be inserted after “image” for consistency (see claim 1, line 1).

In claim 5, it appears “the image” in line 6 should be --an image--, and “store” in line 7 changed to --include-- for clarity and consistency analogous to claim 1. In line 8, it appears “memory” should be deleted for clarity (to avoid possible antecedent problems with “said memory,” e.g.) and consistency (note lines 17-18, e.g.). Similarly, it appears “memory” should be deleted in lines 11, 14 and 16, as well as claim 7, lines 4, 7 and 9 (noting claim 7, lines 10-11). In line 11, it appears “tile data stored in” should be --said tile of image data transferred to-- for clarity and consistency (see lines 9-10, as well as claim 5, lines 15-16 and claim 7, lines 8-9, e.g.). In line 13, it appears “into” should be --to- for consistency (note line 18, as well as claim 1, lines 9-10). In line 15, it appears “on” should be --upon-- for consistency (see claim 1, line 11, e.g.). Also in line 16, it appears “stored in” should be --transferred to-- for clarity (to avoid possible antecedent problems, e.g. Note the “tile of image data” in lines 8-9 and 13, e.g.). See also line 17 (first occurrence of “said tile” should be --that tile--). Also in line 16, --said-- should be inserted before “tile” for clarity (to avoid possible antecedent problems with “said tile cache” in claim 7, e.g.. Note claim 5, lines 8 and 16.).

In claim 6, line 3, it appears “differing” should be --different-- for consistency (note claim 3, line 6, e.g.). See also claim 7, line 14. Also in claim 6, the phrase “for each tile of image data” is somewhat unclear in this context. It appears “for each tile of image data” should simply be deleted for clarity and consistency (see claim 7, lines 12-14, e.g.).

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Also in claim 7, line 6, it appears “into” should be --to-- analogous to claim 5, line 13. In line 8, it appears “on” should be --upon-- analogous to claim 5, line 15. In line 9, --said-- should be inserted before “tile” for clarity analogous to claim 5, line 16. Also, “stored in” should be --transferred to--, and --by said second data processing apparatus-- should be inserted after “memory” for clarity (to avoid possible antecedent problems with “said tile of image data”). In line 10, it appears “said” (first occurrence) should be --that-- for clarity analogous to claim 5, line 17. In line 14, it appears “differing” should be --different-- and --image-- inserted before “data” for consistency.

Appropriate correction is required.

Claims 1-7 are allowed over the prior art of record.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO (2) MONTHS** from the mailing date of this letter.

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



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Tanner is cited as disclosing a system and method for image data processing using a tile cache memory similar to the present invention.

Bentz et al is cited as disclosing an image processing system storing tiles arranged in a matrix of rows and columns.

Alcorn et al is cited as disclosing an image processing system utilizing a plurality of tile caches.

Mieras is cited as disclosing an image processing system having images arranged in tiles and utilizing a cache memory similar to the present invention.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn Gossage whose telephone number is (703) 305-3820.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (703) 308-1756.

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238

(After Final Communications)

(703) 746-7239

(Official Communications)

(703) 746-5713

(Use this FAX number only after approval by the Examiner, for "INFORMAL" or "DRAFT" communications. An Examiner may request that a formal paper/amendment be faxed directly to him or her on occasion.)



GLENN GOSSAGE  
PRIMARY EXAMINER  
ART UNIT 2187